ABSTRACT OF THE DISCLOSURE

The invention provides a system for remotely configuring a plurality of devices to customize a lab network system for testing components and for training operators to use and maintain such systems. The system is configured to remotely access and control such a system via a computer network such as the Internet. Once connected, a user can run testing scenarios on the configured devices remotely from any location that has access to the Internet. In accordance with the invention, an organization's network equipment is integrated with specialized physical switching technologies, and controlled by unique management software. Access to the network equipment may be provided remotely, and granted via a scheduling service. Thus, multiple physical equipment labs can be integrated into one globally, visible resource, enabling one-stop scheduling of lab time without knowing the detailed inventory of a particular network equipment facility. Storage capability is provided for network topologies described using a standards-based topology description language. This topology archive is integrated with the equipment lab management software allowing lab efforts to be saved for later reuse. In addition to topology and configuration information, complete session logs can also be saved, allowing "offline" analysis of lab activities. Network topologies and device configurations may be uniquely specified using a provided authoring environment to facilitate customized lab configurations.